



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,644	05/03/2007	Andrew Holmes	1512.2.167	5357
21552 7590 06/13/2011 AUSTIN RAPP & HARDMAN 170 South Main Street, Suite 735 SALT LAKE CITY, UT 84101				
EXAMINER				
SALONE, BAYAN				
ART UNIT		PAPER NUMBER		
3726				
NOTIFICATION DATE		DELIVERY MODE		
06/13/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptocorrespondence@austin-rapp.com

Office Action Summary**Application No.**

10/580,644

Applicant(s)

HOLMES, ANDREW

Examiner

BAYAN SALONE

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 09, 2011 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (US Patent No. 4,894,898).

4. Regarding Claim 1, Walker discloses a method of producing a structural beam (10) with a web and openings located in the web, which comprises the steps of: taking at least one initial universal beam (10) determining a desired depth (1.5Ds) of a structural beam to be formed from the at least one initial universal beam (10) and a width of material (22, 23) to be removed from the at least one initial universal beam (10)

to achieve the desired depth (1.5Ds) of the structural beam (Col. 2, Line 51-Col. 3, Line 10, Figs. 1A and 1B); making a first cut (18) generally longitudinally along the web of the or each initial universal beam on a first path; the web being generally rectangular in shape and having a first narrow edge and a second narrow edge opposite the first narrow edge, wherein the first cut extends from the first narrow edge to the second narrow edge; making a second cut (20) generally longitudinally along the web of the or each initial universal beam on a second path differing from the first path of the first cut to form cut halves, wherein the second cut extends from the first narrow edge to the second narrow edge (see figures 1A and 1B), wherein the first and the second cuts (18, 20) are spaced apart from each other thereby defining the width of the material (22, 23) there-between; separating the cut halves of the or each initial universal beam removing material (22, 23) between the first and second cut (18, 20); and welding the halves together, to produce a structural beam of a desired depth (Col. 2, Line 49-Col. 3, Line 10, Figs. 1A and 1B).

Walker does not explicitly disclose wherein the first and the second cuts do not intersect at any point. Walker does however disclose manufacturing the beam with a desired depth (1.5 Ds) by making first and second cuts (18, 20) to achieve a width of the material corresponding to a desired depth (1.5 Ds); wherein the distance from the first narrow edge to the center of the opening in the web of the beam (10) is 0.5 Ds (Col. 2, Line 53-Col. 3, Line 32, Fig. 1). Walker further discloses that the dimensions illustrated in the figures of the Walker disclosure may be substituted with other dimensions as desired (Col. 3, Lines 33-37). Based on the aforementioned disclosure the examiner

construes one of ordinary skill in the art may increase the dimension of the width of material (22, 23) removed from the web of the initial universal beam to yield a resulting structural beam wherein the distance from the first narrow edge to the center of the opening in the web is $0.25 D_s$. By increasing said dimension of the width of the material that is removed from the initial universal beam; said first and second cuts made in said initial universal beam (10) will not intersect at any point. It would have been obvious to one of ordinary skill in the art at the time of invention to increase the dimension of the width of the material removed from the initial universal beam; wherein first and second cuts made in the web of said initial universal beam will not intersect at any point for the benefit of producing structural beams of different depths to meet the requirements of structural dimensions per design changes.

Regarding Claim 2, the aforementioned rejection as applied to claim 1 remains as previously applied. Walker does not explicitly disclose wherein the desired depth of the structural beam is less than that of each universal beam from which it is produced however, does disclose that the dimensions illustrated in the figures of the Walker disclosure may be substituted with other dimensions as desired (Col. 3, Lines 33-37). Based on the aforementioned disclosure the width of the material (22, 23) that is removed from the web of the initial universal beam may be increased as desired. Increasing the dimension of the width of the material that is removed from the initial universal beam would yield a structural beam having a depth that is less than that of the initial universal beam from which it is produced. It would have been obvious to one of ordinary skill in the art at the time of invention to increase the dimension of the width of

the material that is removed from the initial universal beam, to yield a structural beam having a depth that is less than that of the or each initial beam from which it is produced for the benefit of producing a structural beams of different depths to meet the requirements of structural dimensions per design changes.

5. Regarding Claims 3 and 4, the aforementioned rejection as applied to claim 1 remains as previously applied. Walker discloses a method wherein the first and second cuts (18, 20) along the web can be such that any shape of openings (Col. 3, Lines 38-41, Figs. 2A and 3A) and any position of the openings can be obtained (Col. 4, Lines 18-26, Figs. 2A-4B).

6. Regarding Claim 5, The aforementioned rejection as applied to claim 1 remains as previously applied. Walker discloses wherein the cut halves of the/or each initial beam are separated and moved longitudinally relative to one another before being welded together (Col. 3, Lines 5-10, Figs. 1A and 1B).

7. Regarding Claims 8 and 9, the aforementioned rejection as applied to claim 1 remains as previously applied. It is noted that these claims are product-by-process claims. Product-by-process claims are not limited to the manipulations of recited steps, only the structure implied by the steps. See MPEP 2113 *Product-by Process claims*. Walker discloses a structural beam (10) comprised of two structural beam halves welded together (Col. 2, Line 49-Col. 3, Line 10, Figs. 1A and 1B).

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (US Patent No. 4,894,898) in view of Litzka (US Patent No. 3,066,394).

9. Regarding Claim 7, the aforementioned rejection as applied to claim 1 remains as previously applied. Walker does not explicitly disclose wherein two or more universal beams are cut and separated into halves and the halves from different cut universal beams are used to produce a structural beam.

10. Litzka discloses a method of forming a structural beam wherein two or more universal beams are cut and separated into halves and the halves from different cut universal beams are used to produce a structural beam for the benefit of providing structural beams having flanges with differing lengths (Col. 3, Line 71-Col. 4, Line 4, Figs. 9 and 10). It would have been obvious to one of ordinary skill in the art at the time of invention to produce the structural beam of Walker using a method wherein two or more universal beams are cut and separated into halves and the halves from the different cut universal beams are used to produce a structural beam as disclosed by Litzka for the benefit of providing structural beams having flanges with differing lengths.

Claim Objections

11. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments filed May 09, 2011 have been fully considered but they are not persuasive.

13. *Applicant Argues Walker fails to teach or suggest the first and second cuts do not intersect at any point.*

As stated in the above 35 USC § 103 rejection Walker discloses manufacturing a structural beam with a desired depth ($1.5 D_s$) and making first and second cuts (18, 20) to achieve a width of the material (22, 23) corresponding to a desired depth; wherein the distance from a first narrow edge to the center of an opening in the web of the beam (10) is $0.5 D_s$ (Col. 2, Line 53-Col. 3, Line 32, Fig. 1). Walker further discloses that the dimensions illustrated in the figures of the Walker disclosure may be substituted with other dimensions as desired (Col. 3, Lines 33-37). The examiner construes one of ordinary skill in the art may increase the dimension of the width of material (22, 23) removed from the web of the initial universal beam to yield a resulting structural beam wherein the distance from the first narrow edge to the center of the opening in the web is $0.25 D_s$. By increasing said dimension of the width of the material that is removed from the initial universal beam; said first and second cuts made in said initial universal beam (10) will not intersect at any point as the width of the material that is moved from the initial universal beam is increased.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BAYAN SALONE whose telephone number is (571)270-7739. The examiner can normally be reached on M-Th, 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571)-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BAYAN SALONE/
Examiner, Art Unit 3726

/DAVID P. BRYANT/
Supervisory Patent Examiner, Art Unit 3726